EMPIRICAL ANALYSIS OF EFFECTS OF BANK MERGERS AND ACQUISITIONS ON SMALL BUSINESS LENDING IN NIGERIA

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Abstract

Mergers and acquisitions are the major instruments of the recent banking reforms in Nigeria. The effects and the implications of the reforms on the lending practices of merged banks to small businesses were considered in this study. These effects were divided into static and dynamic effects (restructuring, direct and external). Data were collected by cross-sectional research design and were subsequently analyzed by the ordinary least square (OLS) method. The analyses show that bank size, financial characteristics and deposit of non-merged banks are positively related to small business lending. While for the merged banks, the reverse is the case. From the above result, it is evident that merger and acquisition have not only static effect on small business lending but also dynamic effect, therefore, given the central position of small businesses in the current government policy on industrialization in Nigeria, policy makers in Nigeria, should consider both the static and dynamic effects of merger and acquisition on small business lending in their policy thrust.

Keywords: Mergers, Acquisitions, Small Business Lending, Bank Capital Model, Agency Theory and Pecking Order Theory.

Introduction

The current reforms in the Nigerian banking system may have come as a surprise to some people. However, to those who have been monitoring the health of the banks, the reforms could not have come as a surprise. The incidence of distressed and technically insolvency of the banking industry has been with us for quite some times. The unprecedented liquidation of twenty-six Nigerian banks in 1998, in addition to the earlier closure of five banks in 1994/95, did not put an end to the distress Syndrome (Iganiga, 2000, pp. 137-198 and Imah, 2005). Indeed, it could be admitted that to have cleansed the banking system of distressed and insolvent institutions in 1998, more institutions ought to have closed, but that was not the case due to some obvious reasons.

Special current reforms include the increase in the minimum paid up capital of banks from ₦500 million before 2001 to ₦1 billion in 2001 and ₦2 billion in 2002. the introduction of the universal banking in 2001 the adoption of the contingency planning for systematic crisis framework; the promotion of the code for good corporate governance, introduction of settlement bank system and so on. These regulatory measures and many others were largely influence by the recent desire of the CBN to proactively position the banking sub-sector as a catalyst agent for development and avoid a repeat of the financial sector distress of the 1990s with its attendant consequences. The measures adopted by the CBN were expected to have remarkably transformed the banking system in terms of size, depth of operation and ownership structures. The reality however, was that the banking system was characterized by illiquidity poor corporate governance and prone to distress, while the Nigerian economy was characterized by stunted growth inflation and high interest rate and stagnated real sector (Zombo, 2005, pp. 46-52; Hanahan and Kenggehial,2001).

It was clear that some drastic measures were urgently needed to make the banking sector respond to the needs of the economy and as a result some reforms were inevitable. It was against this background that the CBN introduced the banking sector reforms that were designed to ensure a diversified, strong and reliable banking sector which will enable the safety of depositor’s money play active developmental roles in the Nigerian economy and be competitive players in the global financial system.

The effects of mergers and acquisitions on bank lending behaviour is quite complex, with one static effect and at least three type of dynamic effects. Entangling these four effects allows us to identify more precisely than the extant literature how mergers and acquisitions affect small business lending. The static effect is simply the result from the banking institutions combining their pre-merger and acquisition assets into a larger institution with a combined balance sheet and competitive position. The static effect might be expected to result in a decreased supply of small business loans, since larger banking institutions tend to make fewer small business loans per naira of assets (Benston,William and Larry,1995).

The restructuring effect is a dynamic effect of the Mergers and acquisitions due to a change in focus in which the institution changes its size, financial condition, or competitive position from their proforma values after consummating a merger and acquisition.

Hence, this study on mergers and acquisition; a viable option for increased profitability of Nigerian banks and availability of funds for lending to small and medium scale enterprise was undertaken to examine the strength and place of mergers and acquisitions in providing fund for lending to small business.

The following research questions guided the study in its guest to provide solution to the problem that prompted the study:

(i) What is the static effect relationship of banks merger and acquisition on small business lending in Nigeria?

(ii) What is the direct effect relationship of banks merger and acquisition on small business lending in Nigeria?

(iii) What is the restructuring effect relationship on small business lending in Nigeria?

(iv) What is the external effect relationship of banks merger and acquisition on small business lending in Nigeria?

Conceptual framework:

Bank capital model

This model considers the lending behaviours of bank to small and medium businesses to be affected by a capital adequacy requirement. According to Obamuyi (2007, pp. 6-7), “the bank capital channel views a change in interest rate as affecting lending through banks’ capital, particularly when banks’ lending is constrained by a capital adequacy requirement.

The lifecycle approach

The lifecycle approach, as, described by Weston and Brigham (1981), was conceived on the premise of rapid growth and lack of access to the capital market. Small firms were

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seen as starting out by using only the owners' resources. If these firms survived, the dangers of undercapitalization would soon appear and they would then be likely to make use of other sources of funds, such as trade credit and short-term loans from banks, rapid growth could lead to the problem or illiquidity.

"The dynamic small firm would therefore have to choose between reducing its growth to keep pace with its internally generated funds, acquire a costly stock market quotation, or seek that most elusive form of finance-venture capital" (Weston and Brigham, 1981).

Therefore, indicating a trend in small and medium business that expanding small firms are likely to experience rising short-term debt and use little or no long-term debt.

The pecking order theory

The pecking order theory as propagated by Myers (1984, pp. 199-233) that firms finance their needs in a hierarchical order, first by using internally available funds, followed by debt and external equity. This practice is more common in Small Firms practice and indicates the negative relationship between profitability and external borrowing by small firms. According to the report by South African reserve bank (2004). "this hypothesis implies that there tends to be a negative relationship between profitability and external borrowing by small firms. In other words, assuming a zero growth firms with high profitability would generate higher levels of internal liquidity, reducing the need for borrowing. Older firms, it may then be hypothesized, would make less use of external finance and, instead, would rely on retained funds."

Agency theory

This theory places emphasis on transaction costs, contracting analysis following the work, Coase (1937, pp. 386 – 405), Jensen and Meckling (1976) and most important, Stiglitz and Weiss (1981). The work of these writers all point to the challenges that surround ownership, contractual agreements, management interrelationship and credit rationing between small and medium scale businesses and external providers of finance, thereby subjecting firms to the risk of asset substitution which in practice means a change in the firm's asset structure. For very small and micro-enterprises, this asset substitution may well take place between the enterprise and the owner's household. As described in the report by South African reserve bank (2004) "The presence of these problems in small firms may explain the greater use of collateral lending to small firms as a way of dealing with these agency problems. Lenders' strategies for dealing with these problems also add significantly to the cost of dealing with this sector. For a large enterprise the evaluation of an application for finance may be limited to the assessment of an (audited) set of financial statements and supporting documentation provided by the applicant, while for small and medium businesses the assessment frequently has to go far beyond this, implying a substantially higher transaction cost"(Bellow,2005).

Critical factors influencing banks lending to small and medium enterprises

Hallberg,2000; Jombo,2005 and Ojo,2003, posited that, the banks' inability to grant loans to small and medium enterprises is due to some problems associated with the small and medium enterprises themselves, apart from the inadequate banks' lending resources, based on the Basel Capital Adequacy Ratio and other regulatory requirements. On the demand side, there are reasons attributed to the activities of the small and medium enterprises which have constraint credit to the small and medium enterprises.

The major reasons attributable to small and medium enterprises that have made accessibility to credit difficult include, although not limited to, poor credit worthiness, lack of collateral security, poor project package, lack of adequate record and high risk. All these problems have combined in several ways to make lending to the sector very difficult by the commercial banks. On the supply side, lending to small and medium enterprises are constrained due largely to regulatory/ market requirements and the soundness of the banking sector. The supply of loan able funds by banks depends on the soundness of the sector and based on the various regulatory requirements like Capital Adequacy Ratio (CAR), Reserve Requirements (RR), Liquidity Ratio (LR), Interest Rate Developments (IRD) and the lending policies of the banks. These requirements have varied degrees of influence on the amount of money available for lending by the banks (Pandey,2005; Nzotta,2002 and Craig and Hardee, 2004) .

The CBN (2005) analysis shows that the marginal/unsound banks exhibited such weakness as undercapitalization, illiquidity, weak/poor asset quality, poor earnings, among others. Thus, inadequate financial resources and distress on the part of the banks may constrain credit to the enterprises. The full implications of the various constraints to lending have been that commercial banks lending to firms, especially the small and medium enterprises sector, has been mainly on short-term basis.

However, the short term lending of banks is understandable, since most of the funds were mobilized on short-term basis by the commercial banks. Moreover, the doctrine of anticipated income theory of lending encourages banks to grant short credit to industry and trade, which are self-liquidating in nature. Although, the small and medium enterprises need long-term loans, it has been claimed that it will amount to financial indiscipline on the part of commercial banks to finance long term projects with short-term finance, especially in a country with macro economic instability and uncertainty in business. This behaviour of the banks is linkened to risk aversion. The obvious consequences of this risk averse behaviour is that, small and medium enterprises which rely on bank loans, cannot plan on long term basis, thereby constraining growth plans and long term investment decision (Shapiro and Balbirer, 2002 and 2008).

The effect of bank merger and acquisition on small business lending

Berger, Kashyap and Scalise (1995,pp. 187-228) suggest that the larger, more organizationally complex institutions that are created from merger and acquisition, may be less predisposed than smaller, less complex institutions to supply credit to small, less informed borrowers. These borrowers who are mostly dependent on banks for credit and whom the bank borrowers relationship is important do not get credit facilities. Larger institutions according to them may be less predisposed to extend loans that demand intimate knowledge of the small business, its owners, and its local market because of diseconomies associated with producing such loans along with other financial service products. These diseconomies might arise because lending to small, less informed borrowers and lending to large, informational transparent borrowers may be distinctly different in their activities that require the use of different technologies and entirely different credit cultures (Berger, Kashyap and Scalise,1995 and Berger, Robert, Hesna and Udell, 2000). The policies and procedures associated with screening and monitoring small informational opaque borrowers and transmitting the relevant information within the banking institution may be very different from those associated with providing transaction – driven loans to large, informational transparent borrowers. In addition to a financial institutions size, its organizational complexity, may also affect its small business lending. Cole, Wokens and Woodbum (1996) postulate that prior research has established a fairly strong link between banking institution size and the supply of small business credit, with large institutions devoting lesser proportions of their assets to small business lending than small institutions. Berger, Kashyap and Scalise (1995) opine that this simplistic analysis assumes that lending propensities are static and determined solely by size of a bank. It neglects the fundamental nature of merger and acquisition as dynamic event that may involve significantly changes in organizational behaviour beyond the simple static aggregation of the merging institution. Such conclusions also ignores the reactions of other lenders in the same local market that might pick up any profitable loans that are no longer supplied by the consolidated institutions, or may react with their own dynamic changes in behaviour that either increase or decrease their supply of small business loans. Berger and Udell (1996) state that there are other factors beyond institution's size and organizational complexity, such as Emeni and Okafor (2005, pp. 147) changes in market competitiveness or changes in the degree of ownership control, theoretically may affect small business lending either positively or negatively. Levonian and Soller, (1995) opine that some of the literature had focused on the association between small business lending and banking institution size and organizational complexity. Berger, Kashyap Scalise (1995) and Berger and Udell (1996), Peek and Rosengren (1996) and Strahan and Weston (1996) found that small banking institutions tend to invest much higher proportions of their asset in small business loans than large institutions. Berger, Kashyap and Scalise (1995) suggest that the impact of merger and acquisition on bank lending behaviour is quite complex, with one static effect and at least three dynamic effects. Disentangling the four effects makes it possible to identify more precisely how merger and acquisition affect small business lending. The static effect as postulated by Berger, Kashyap and Scalise (1995) is simply the result of the banking institutions combining their pre merger and acquisition asset, into a larger institution with a combined balance sheet and competitive position. The static effect might be expected to result in a decreased supply of small business lending, since (as discussed above) large banking institutions tend to lend to fewer small business loans per naira of asset. For example, if a bank with N600 million in assets merge with a N400 million bank. The static effect of small business lending captures the predicted differences in lending between a typical N1 billion bank and the two smaller banks. The N1 billion bank that resulted from simply adding together the pre merger and acquisition balance sheets of the

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merging parties is referred to as the pro-forma bank. The static effect also brings to bear the impact from combining the financial condition or other exogenous variables of the two smaller institutions. Furthermore, stated by Berger, Kashyap, and Scalise (1995) ,the restructuring effect is a dynamic effect of the merger and acquisition due to a change in focus in which the institution changes its size, financial condition, or competitive position from their pro-forma values after consummating merger and acquisition. In the simple example as stated above, merger of the N600 million bank and the N400 million bank might eventually result in a merged bank of only N800 million, rather than the N1billion bank. This could occur, for example, if the purpose of the merger was to reduce excess banking capacity in the local market. This reduction in bank size from the N1 billion pro-forma bank to the N800 million actual banks would likely increase its proportion of asset devoted to small business lending since smaller institutions tend to have higher proportion of these loans(Epstein,1993 and Demsetz and Strahan,1997).

Moreover, Berger, Kashyap and Scalise (1995) say that direct effect is the change in lending attributable to a direct refocusing of attention toward or away from small business lending, net of any of the static and restructuring effect already discussed. That is, the direct effect of the merger and acquisition is the difference between a banks lending after consolidation and the lending of another institution of the same size, financial condition, local market competitive position, and economic environment as the restructured bank that has not undergone merger and acquisition in terms of our example in which the N600 million and N400 million banks merge and becomes a N800 million bank after restructuring the effect is how the bank lending differs from another N800 million bank that is the same in every respect as the restructured bank except that it did not engage in a recent merger and acquisition.

Berger and Udell (1996) in their work, captured the reactions by other lenders in the local market to the change in competitive conditions created by them. For merger and acquisition example, if a consolidated institution reduces its small business lending it may create opportunities for other local banks to pick up loans with positive net present values. Goldberg and White (1998) consistent with this possibility, found that De novo banks tend to lend more to small businesses as a percentage of assets than other small banks comparable size.

Capital constraint model

The capital constraint model describes the behaviour of banks restrain to gives out loans to small and medium businesses because of the limitation of available financial resources bank. According to the work of Obamuyi (2007), "basically, banks are subjected to both market and regulator imposed capital requirements. For prudential purposes, banks regulators generally require banks to maintain capital at not less than a stated fraction of the bank's total assets. For instance, banks are expected to meet the capital adequacy requirement of the Basel Accord of ten per cent." This situation is visible in Nigeria, as banks are expected to maintain a minimum of 40 per cent liquidity ratio of total deposits. Thus, an increase in interest rates will raise the cost of banks' external funding but reduce banks' profit and capital. The tendency is for the banks to reduce their supply of loans if the capital constraint becomes binding. However, banks could also become more willing to lend during certain periods because of an improvement in their underlying financial condition." This condition as purported by this model is clearly seen in the relationship between banks and small and medium scale businesses as the small and medium businesses suffers through a lack of financial assistance as a result of this situation.

Methodology

The research design adopted for the study was the cross sectional research design. This choice of the cross sectional research design was because the data were collected at a particular point in time (2004, 2005 and 2006) from the sampled banks: United Bank, Continental Trust Bank (Merged Bank) and Guaranty Trust Bank (Un-merged). The population of the study was all the twenty five banks making up the Nigerian banking sector.

The technique adopted in obtaining data for this study relied much on intensive library research and questionnaire administration. Thus, data for this study were obtained from published journals, texts, paper presentations, newspapers, annual reports, central bank of Nigeria statistical bulletin and internet materials and responses on the administered questionnaires.

Result and discussion

Table 1:Impact of bank deposit on small business lending using pre-merged data (static effect).

Regressor	Coefficient	t-ratio	Standard error
Intercept	-2258.52	-0.96	2343.52
Bank Deposit	0.32	12.88*	0.03

R-square = 0.92, Adjusted R-square = 0.92, <statistic = 166.00, SER = 5975.28; D/W = 1.27

* Significant at 5% level.

Source: Researcher's analysis based on data obtained for the study, 2011.

Table 2:

Regression results of the impact of Bank size, bank financial characteristics, bank market shares, merged- bank deposit, bank deposit for non-merged bank, external loan to small businesses (dynamic effect).

Regressor	Coefficient	t-ratio	Standard error
Intercept	-31704.27	-1.44	21974.00
Bank Deposit	0.47	2.81*	0.17
Bank financial characteristics	300457.20	3.92*	76564.48
Bank market shares	-6694.74	-0.13	51394.87
Merged-bank deposit	-1.50	-4.04	0.37
Bank deposit for non-merged bank	2.13	7.35*	0.29

R-square = 1.00; Adjusted R-square = 1.00,

F-statistic =809.74; SER = 1366.18, D/W = 1.12

* significant at 5% level.

Source: Researcher's analysis based on data collected for the study.

This study attempted to fulfill the great need for evidence on the static and dynamic effects of bank merger and acquisition on small business lending in Nigeria. The static effect resulted in a positive relationship between small business lending and bank size because for every one naira deposit received about 0.33k was given out to small businesses. This position is in agreement with prior researches such as Cole, Wolkens, and Woodburn (1996); Berger, Kashyap and Scalise (1995); and Berger, Robert,Hesna, Scalise and Udell (2000).

However, the dynamic effect of merger and acquisition in the Nigerian banking sector which was reported as restructuring direct and external effects gave an opposite result. The restructuring and direct effects show that bank size is negatively related to small business lending and also there is a negative relationship between external loan by small institutions like micro-finance institutions and small business lending.

Based on the above analysis, it is evident that, the larger the size of a bank by way of merger and acquisition (static effect), the more it tends to lend to small businesses. Also, it was gathered from the result of this study that, change in banking focus (e.g. cutting down of branches in local areas) otherwise referred to as restructuring effect, resulted in poor lending to small businesses even with merger and acquisition.

The surprise result of poor reaction of other lenders besides banks (e.g., Micro-finance Institutions) in the local market to opportunities created by the restructuring and direct effects of merger and acquisition is not good for the economic development of Nigeria.

Conclusion and recommendations.

The study tested the effects of merger and acquisition on small business and acquisition on small business lending using data from Nigerian banking system in the recent times. It is believed that the findings of the study represent extension of the existing research literature that may be usefully applied elsewhere in taking decision involving mergers and acquisition. In particular the exclusion of the static and dynamic effects, all the major types of bank ownership in the model is important to avoid potentially biased and misleading results.

Recommendations

Based on the findings of this study, the following recommendations were made:

(i) Given the central position of small businesses in the current government policy on industrialization of Nigeria, policy makers in Nigeria should consider both the static

ISSN 2278-7763

and dynamic effects of merger and acquisition on small business lending in their thrust.

(ii) Key stakeholders of the economy should reduce those factors militating against bank's lending to small businesses and put in place a strategy by which the perceive friskiness associated with lending is eliminated.

(iii) Researchers should begin to develop a new framework for financial market stability as opposed to banking consolidation policy.

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